

**THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of : Soledad Penades, et al.  
Serial No. : 10/559,957  
Filing Date : December 8, 2005  
Examiner : Not yet assigned  
Group Art Unit : Not yet assigned  
Entitled : "Magnetic Nanoparticles Linked  
to a Ligand"

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Suite 2400  
1601 Market Street  
Philadelphia, PA 19103  
(215) 563-4100 (telephone)  
(215) 563-4044 (facsimile)  
Our File No. 0380-P03930US0  
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Mail Stop: AMENDMENT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT**  
**UNDER 37 C.F.R. §1.97**

Dear Sir:

In compliance with the duty of disclosure set forth in 37 C.F.R. § 1.56, Applicants are submitting herewith one sheet of Form PTO/SB/08a and four sheets of Form PTO/SB/08B listing references which the Examiner is respectfully requested to consider and make of record in this application. This Information Disclosure Statement is being filed more than three months after the filing date, but before receipt of the first Official Action on the merits. Thus, it is believed by the undersigned attorney that no fee is required under 37 C.F.R. §1.97(b).

Several references listed in this Information Disclosure Statement are from the International Search Report in the international application (PCT/GB/04/002480) on which this U.S. national stage patent application is based. Further, several references listed in the Information Disclosure Statement were cited in the Great Britain search report.

This submission is not an admission that the references listed on the attached Forms PTO/SB/08a and PTO/SB/08b constitute prior art against the claims of this application.

The above-identified international application entered the U.S. national phase after June 30, 2003. Therefore, copies of the U.S. patents and/or published U.S. applications listed on Forms PTO/SB/08a and PTO/SB/08b are not included (see O.G. Notice, August 5, 2003).

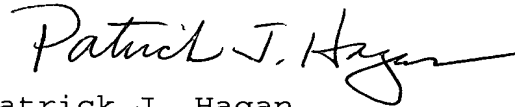
The Examiner is respectfully requested to confirm receipt and consideration of the cited references by initialing and returning a copy of the attached Forms PTO/SB/08a and PTO/SB/08b in accordance with MPEP §609.

In the event that any fee is required in connection with this submission and not enclosed, the Commissioner is authorized to charge such fee to the account of the undersigned attorneys, Account No. 04-1406. A duplicate copy of this paper is enclosed.

Early and favorable consideration of this application is respectfully requested.

Respectfully submitted,  
DANN, DORFMAN, HERRELL AND SKILLMAN  
A Professional Corporation  
Agent for Applicants

By:



Patrick J. Hagan  
Registration No. 27,643

PJH:LCF

Enclosures - Forms PTO/SB/08a and PTO/SB/08b  
- Copy of references

Substitute for form 1449/PTO

**Complete if Known**

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Sheet	1	of	5
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FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)	MM-DD-YYYY			
	B1	WO 02/093140	11-21-2002	Johns Hopkins Univ.		
	B2	WO 02/032404	04-25-2002	Consejo Superior ...		
	B3	WO 99/61911	12-02-1999	Univ. of North Carolina		
	B4	WO 03/086660	10-23-2003	Government of the U.S.		

Examiner  
Signature

Date Considered	
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND**

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

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Attorney Docket Number	0380-P03930US0

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**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	C1	FLEMING, D.A., et al., "Chemically Functional Alkanethiol Derivatized Magnetic Nanoparticles," Mat. Res. Soc. Symp. Proc., 746:207-212, (2003).	
	C2	TERANISHI, T., et al., "Fabrication of gold nanoparticle superlattices and their optical and electronic properties," Gold, pages 978-982, (2003). (5 pages)	
	C3	SRIKANTH, H., et al., "Dynamic transverse susceptibility in Au-Fe-Au nanoparticles," Materials Science and Engineering, A304-306, 901-904, (2001).	
	C4	PARK, S-J., et al., "Synthesis and Magnetic Studies of Uniform Iron Nanorods and Nanospheres," J. Am. Chem. Soc., 122:8581-8582, (2000).	
	C5	NIEMEYER, C.M., "Nanoparticles, proteins, and nucleic acids: biotechnology meets materials science," Angew. Chem. Int. Ed., 40:4128-4158, (2001).	
	C6	BERGEMANN, C., et al., "Magnetic ion-exchange nano- and microparticles for medical, biochemical and...", Journal of Magnetism and Magnetic Materials, 194:45-52, (1999).	
	C7	WHITESIDES, G.M., et al., "Magnetic separations in biotechnology," Trends in Biotechnology, 1:144-148, (1983).	
	C8	SUN, S., et al., "Monodisperse FePt Nanoparticles and Ferromagnetic FePt Nanocrystal Superlattices," Science, 287:1989-1992, (2000).	
	C9	SHAFI, K.V.P.M., et al., "Surfactant-assisted self-organization of cobalt nanoparticles in a magnetic fluid," Advanced Materials, 10:590-593, (1998). (4 pages)	
	C10	FRIED, T., et al., "Ordered two-dimensional arrays of ferrite nanoparticles," Advanced Materials, 13:1158-1161, (2001). (4 pages)	

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	C11	MOUMEN, N., et al., "Controlled preparation of nanosize cobalt ferrite magnetic particles," Journal of Magnetism and Magnetic Materials, 149:67-71, (1995).	
	C12	SUSLICK, K.S., et al., "Sonochemical Synthesis of Iron Colloids," J. Am. Chem. Soc., 118:11960-11961, (1996).	
	C13	SUN, S., et al., "Size-controlled synthesis of magnetite nanoparticles," J. Am. Chem. Soc., 124:8204-8205, (2002).	
	C14	GUO, Q., et al., "Patterned Langmuir-Blodgett films of monodisperse nanoparticles of iron oxide using soft lithography," J. Am. Chem. Soc., 125:630-631, (2003).	
	C15	SUN, S., et al., "Polymer mediated self-assembly of magnetic nanoparticles," J. Am. Chem. Soc., 124:2884-2885, (2002).	
	C16	JOSEPHSON, L., et al., "High-efficiency intracellular magnetic labeling with novel superparamagnetic-tat peptide conjugates," Bioconjugate Chem., 10:186-191, (1999).	
	C17	LEWIN, M., et al., "Tat peptide-derivatized magnetic nanoparticles allow in vivo tracking and recovery of progenitor cells," Nature Biotechnology, 18:410-414, (2000).	
	C18	JOSEPHSON, L., et al., "Magnetic nanosensors for the detection of oligonucleotide sequences," Angew. Chem. Int. Ed., 40:3204-3206, (2001).	
	C19	de la FUENTE, J., et al., "Gold glyconanoparticles as water-soluble polyvalent models to study carbohydrate interactions," Angew. Chem. Int. Ed., 40:2257-2261, (2001).	
	C20	BARRIENTOS, A.G., et al., "Gold glyconanoparticles: synthetic polyvalent ligands mimicking glycocalyx-like surfaces as tools for...", Chem. Eur. J., 9:1909-1921, (2003).	

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Sheet 4

of 5

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	C21	ZHOU, W.L., et al., "Nanostructures of gold coated iron core-shell nanoparticles and the nanobands assembled under magnetic field," Eur. Phys. J. D, 16:289-292, (2001).	
	C22	MYKHAYLYK, O., et al., "Glial brain tumor targeting of magnetite nanoparticles in rats," J. Magnetism and Magnetic Materials, 225:241-247, (2001).	
	C23	JORDAN, A., et al., "Magnetic fluid hyperthermia (MFH): cancer treatment with AC magnetic field induced...", J. Magnetism and Magnetic Materials, 201:413-419, (1999).	
	C24	JOSEPHSON, L., et al., "Near-infrared fluorescent nanoparticles as combined MR/optical imaging probes," Bioconjugate Chem., 13:554-560, (2002).	
	C25	TATON, T.A., et al., "Scanometric DNA array detection with nanoparticle probes," Science, 289:1757-1760, (2000).	
	C26	GAMBARDELLA, P., et al., "Giant Magnetic Anisotropy of Single Cobalt Atoms and Nanoparticles," Science, 300:1130-1133, (2003).	
	C27	DI FELICE, R., et al., "DFT study of cysteine adsorption on Au(111)," J. Phys. Chem. B, 107:1151-1156, (2003).	
	C28	DAVIDOVIC, D., et al., "Spectroscopy, Interactions, and Level Splittings in Au Nanoparticles," Physical Review Letters, 83:1644-1647, (1999).	
	C29	VITOS, L., et al., "Size-dependent paramagnetic-ferromagnetic phase transition in palladium clusters," Physical Review B, 62:R11957-R11960, (2000).	
	C30	HERNAIZ, M., et al., "A model system mimicking glycosphingolipid clusters to quantify carbohydrate self-interactions...", Angew. Chem. Int. Ed. 41:1554-1557, (2002).	

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Sheet	5	of	5
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SignatureDate  
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